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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,272	10/31/2003	Stefek Malkowski Zaba	200308879-2	7911
	22879 7590 12/18/2006 EXAMINER			
	P O BOX 272400, 3404 E. HARMONY ROAD WALSH, DANIEL I			DANIEL I
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
	,		2876	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS		12/18/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**	Application No.	Applicant(s)
	10/697,272	ZABA ET AL.
Office Action Summary	Examiner	Art Unit
	Daniel I. Walsh	2876
The MAILING DATE of this communicati Period for Reply	on appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAILI  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  If NO period for reply is specified above, the maximum statutory.  Failure to reply within the set or extended period for reply will, b Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNION CFR 1.136(a). In no event, however, may a retion.  Propersion will apply and will expire SIX (6) MON y statute, cause the application to become AE	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed or	13 September 2006.	
<u> </u>	This action is non-final.	
3) Since this application is in condition for a	allowance except for formal matt	ters, prosecution as to the merits is
closed in accordance with the practice u	nder <i>Ex parte Quayl</i> e, 1935 C.D	). 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-3 and 5-25</u> is/are pending in t	he application.	
4a) Of the above claim(s) is/are w	• •	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-3,5-20 and 22</u> is/are rejected.		
7)⊠ Claim(s) <u>21 and 23-25</u> is/are objected to		
8) Claim(s) are subject to restriction		
Application Papers		
9) The specification is objected to by the Ex	aminer.	
10) The drawing(s) filed on is/are: a)	☐ accepted or b)☐ objected to	by the Examiner.
Applicant may not request that any objection	to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the		
11) The oath or declaration is objected to by	the Examiner. Note the attached	d Office Action or form PTO-152.
Priority under 35 U.S.C. § 119	,	
12)☐ Acknowledgment is made of a claim for fo	oreian priority under 35 U.S.C. 8	S 119(a)-(d) or (f)
a) ☐ All b) ☐ Some * c) ☐ None of:	5. 5.g., phoney andor 00 0.0.0.	,
1. Certified copies of the priority doct	ments have been received	
2. Certified copies of the priority doct		oplication No
3. Copies of the certified copies of th		
application from the International E		Televise in the stational diago
. * See the attached detailed Office action for	, , , ,	rėceived.
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ttachment(s)		
)☑ Notice of References Cited (PTO-892) )☑ Notice of Draftsperson's Patent Drawing Review (PTO-9	4) Interview S	Summary (PTO-413) s)/Mail Date
)  Notice of Draπsperson's Patent Drawing Review (P10-9- )  Information Disclosure Statement(s) (PTO/SB/08)		symal Date nformal Patent Application
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## **DETAILED ACTION**

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1. Receipt is acknowledged of the RCE received on 9-13-06.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5, 18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrieta, as cited in the previous Office Action, in view of Azuma (US 6,704,608).

The teachings of Arrieta have been discussed in the previous Office Action. Namely,

Arrieta teaches security document comprising a printed document and one or more circuits to be
read wirelessly that are incorporated into the document and that the memory circuit is physically
isolated so as to inhibit tampering or configured to indicate when tampering has occurred

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(abstract). Arrieta teaches that the emitter (radio frequency, as per claim 3) is integrated into the hologram. The Examiner interprets the hologram to broadly be interpreted as a tamper evident strip. The Examiner notes that the teachings of Arrieta are interpreted to extend to include those of an identification card, which is listed as a security document (paragraph [0002]). Re claim 5, as the antenna is connected to the IC, which is integrated into the substrate, the antenna is therefore interpreted to be configured for detection or resistance of physical tampering/tamper resistant means.

Arrieta is silent to protecting the memory circuit from access by an unauthorized reader.

Azuma teaches mutual authentication for increased security (abstract). This is interpreted to include protecting access from an unauthorized reader. Re claim 2, Azuma teaches the power is provided from the reader (abstract), or that the card is passive. It would have been obvious to use inductive power means, in order to reduce document cost/size/complexity as is known in the art.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Arrieta with those of Azuma.

One would have been motivated to do this for increased security.

Re claim 18, FIG. 2 of Arrieta shows the circuit on an external surface of the document exposed to the environment.

4. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrieta/Azuma, as discussed above, in view of Habara et al. (US 2003/0136851).

The teachings of Arrieta/Azuma have been discussed above.

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Arrieta/Azuma is silent to identifying an authorized bearer of the security document and that the document allows access to asset(s) of the bearer.

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Habara et al. teaches the document is used to identify/authenticate an authorized bearer of the document (abstract). The Examiner has interpreted permitting entrance to authorized users to certain areas, as means to access assets, as the identification provided by the card permits entrance into areas where assets could be located. Additionally, the Examiner notes that it is well known and conventional in the art for security documents/cards to be presented by a user to verify themselves for access to an area, services, safe deposit boxes, restricted areas, etc. (by presentation of id cards, passports, bank cards, drivers license, etc.), where assets can be located.

5. Claims 8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma (US 6,704,608).

Re claim 8, Azuma teaches a printed document (FIG. 1A). The printed document includes printed information and second information for writing to a memory circuit (13) of the printed document. The second information is protected from unauthorized reading, as mutual authentication with a reader/terminal (abstract) is required. Mutual authentication is understood to include verifying the document/card and reader, for security purposes. The Examiner notes that though the teachings of Azuma are silent to the creation of the document (printing on the document and writing to the memory circuits), the Examiner notes that it would have been obvious to one of ordinary skill in the art to print first information on the document and write second information into the memory (read wirelessly as shown in FIG. 1A), as such means are well known and conventional in the art to produce a card/document and provide for readable (man) and machine readable information (stored), to provide conventional card/document

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functionality. The Examiner notes that the circuit/memory is understood to be isolated to inhibit physical tampering/physically located, as it is disposed in one of the layers of the document.

Tampering with the memory would also be visibly discernable.

Re claims 11-12, the teachings have been discussed above. The Examiner notes that it would have been obvious to one of ordinary skill in the art to determine information before its printed/written in order to create the card/document, and that circuits are attached in/on the card/document as is conventional in the art to store information. Indicia/information printing on a card/document is well known in order to provide information about the user, manufacturer of the card/document, etc.

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habara et al. (US 2003/0136851) in view of Azuma, as discussed above.

Habara et al. teaches reading first information printed in the printed document and wirelessly reading second information in a memory circuit and using the second information with the first information to asses the document/compare characteristics of the bearer of the document (abstract and paragraph [0052] which teach comparing the printed identification data to the stored data read out to verify a user).

Habara et al. is silent to obtaining authorization information to read the document, wirelessly powering the document, and reading the second information in the memory circuit using authorization information.

The teachings of Azuma have been discussed above. Azuma teaches powering the document (abstract) and mutual authentication as is understood with mutual authentication;

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authorization information is obtained, by verifying the reader/(card/document), in order to read the stored information of the security document.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Azuma with those of Habara et al.

One would have been motivated to do this to increase the security associated with card/document information.

7. Claim 1, 13-15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrieta, as discussed above, in view of Baldi (US 6,547,151), and Conwell (US 2002/0135481).

The teachings of Arrieta have been discussed above, including paper (currency). Arrieta is silent to the memory circuit being protected from an unauthorized reader.

Arrieta teaches a radio tag, but is silent to tamper evident strips that correspond to cuts on the document.

Conwell teaches such limitations (FIG. 5).

Árrieta/Conwell are silent to protection from unauthorized reading.

Baldi teaches currency (paper) that can have a read password (col 5, lines 15+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Arrieta with those of Conwell and Baldi.

One would have been motivated to do this to provide for additional protection against removal/tampering.

The Examiner has interpreted the circuit to have tamper resistant means, as its incorporated into the document.

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8. Claims 16-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (US 2004/0060978).

Okamoto et al. teaches a printed document with one or more memory circuits to be read wirelessly that are attached to or incorporated into the document, protecting data from unauthorized readers, that the memory circuit is physically isolated to inhibit physical tampering or indicate when tampering has occurred, and that the printed and memory data identifies a bearer of the document (abstract and FIG. 1). The Examiner notes that as the data is encrypted, it is interpreted as being protected from access by unauthorized readers. Fig. 6 teaches that the chip and scanned information are matched for authenticity. Accordingly, as Okamoto et al. teaches that the document can be mail, paper currency, certificate of share/stock, gift certificate, etc. (paragraph [0118]+), the Examiner notes it would have been obvious that for at least mail or a gift certificate, that printed information would include a name. As such, it has been discussed that the printed information is also stored on the chip. Therefore, the Examiner notes it would have been obvious to one of ordinary skill in the art for the data to identify a bearer, in such instances, as such printed data is conventional in the art for identification purposes on such paper documents

Re claim 17, the limitations have been discussed above (see FIG. 3).

Re claims 19 and 20, Okamoto et al., as discussed above, teaches the circuits on the outside (FIG. 3 and mounting unit 23).

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# Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are not Persuasive.

In response to the Applicants argument re claim 1 that Azuma has nothing to do with indicating when physical tampering of the smart card has occurred, the Examiner respectfully disagrees. As the chip is isolated, it is believed that tampering of the chip would be readily visible, and therefore inhibits tampering because such tampering would compromise the card appearance. In addition, the Examiner maintains that a hologram, conventionally applied in a one-piece adhesive form, is broadly interpreted as a tamper evident strip, because removal or alteration of the hologram would be apparent.

Re the Applicants argument re claims 8, 11, and 12 that Azuma does not disclose writing second information to one ore more memory circuits configured to be read wireless for attachment to or incorporation within the printer document, the Examiner has broadly interpreted the card as a printed document. It is well known and conventional in the art that cards, smart card, IC cards, RFID cards, etc., can include printed information for identification purposes. Therefore, it is believed that a card can be broadly interpreted as a printed document, and the claim languag4e does not preclude such an interpretation.

Re the Applicants arguments re claims 9 and 10, the Examiner notes that the teachings of Azuma/Habara et al., which teach a guard checking, are broadly interpreted to read on the claims, as the reading of at least the first information on the printed document does not preclude manual reading by the guard, for example.

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Re the Applicants arguments re claims 13-15, a new rejection has been cited above.

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Re the Applicants argument of claims 16, 17, 19, and 20, the Examiner notes that it is well known and conventional that gift certificates can include names for personalization/customization, and therefore is broadly interpreted to read upon the claims.

Additionally, the mere incorporation of a chip in a document/sheet/page is broadly interpreted as physical isolation.

## Allowable Subject Matter

10. Claims 21 and 23-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The reasons for allowance have been discussed in the previous Office Action. Re new claims

23-25, these claims claim detecting a changed in a physical property of an antenna, the change being indicative of tampering, and disabling reading of the circuit when the tampering is detected, which therefore includes subject matter of claim 21, indicated as contain allowable subject matter.

The Examiner notes that it is well known and conventional that when antennas are broken, or disrupted in cards/documents that they cannot function. Additionally, Walker et al. (US 2005/0085951) teaches that an antenna in a car is detected when damage or it is removed, but this is not seen as applicable to the current Application, and doesn't teach deactivating memory access of a security document.

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#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: (see PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh Examiner

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12-8-06

DANIEL WALSH PRIMARY EXAMINER